

REMARKS

In the Office Action, dated April 5, 2004, the Examiner states that Claims 1-20 are pending, Claims 1-18 are rejected, and Claims 19 and 20 are withdrawn. By the present Amendment, Applicant amends the specification and the claims.

In the Office Action, the drawings are objected to because "process tube 14 is also designated as a non-porous tube 14". The Applicant assures the Examiner meant to object to "porous tube 14". By the present amendment the specification, claims and drawings uniformly refer to the non-porous tube with reference numeral 14 and the porous tube with reference numeral 8. No other members are referred to by these reference numerals.

In the Office Action, the specification is objected to under 35 U.S.C. 132 that new matter has been introduced into the disclosure and refers to the following new matter:

- (a) "...a substantially horizontally extending porous absorber body' at p.008 (0006) paragraph."
- (b) "...the condenser being slightly horizontally inclined"
- (c) "...wherein said still operates at a temperature of greater than 80 Celsius' at p.013, par. (0031)"

With regard to (a), the specification and claims have been amended to remove the term "substantially" in order to overcome this objection. With regard to (b), the claims are herewith amended to 'condenser being inclined slightly downwardly' as disclosed in paragraph 0032 of the original specification: "the non-porous condenser tube 14 inclines slightly downwardly so as to discharge distillate through harvesting means". As such, the Applicant respectfully submits that this objection has been overcome. With regard to (c), the specification and claims have been amended to cancel this matter and the

applicant submits that this objection is no longer relevant. Paragraph 0006 has been amended to conform with the amended Claim 1.

In the Office Action, Claims 8-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The claims have been corrected and amended to overcome this objection and the claim set as a whole has been reviewed to remove any such further inconsistencies. We note, however, that the specification as originally drafted in paragraphs 0039-0041 disclose 5 components making up a 'reflecting means' and a 'tracking means'. As such, the claims as now amended maintain these phrases as unique identifiers for a group of components specifically identified.

In the Office Action, Claims 1-18 are rejected under 35 U.S.C. 103(a) "as being unpatentable over Applicants' Disclosure of Admitted Prior Art in view of Coffey et al (3,785,931) and Kaufmann (5,650,050)." The Applicant respectfully submits that the present invention is wholly distinguishable over the cited prior art.

The Applicant refers to Kaufmann US 5650050. The device for desalination of seawater disclosed in Kaufmann makes no realization of using a porous member as disclosed in the present invention. Rather, Kaufmann discloses a method whereby feed water is sprayed onto an absorber body. At no point in the Kaufmann device does the feed water permeate a porous member. As such, there is no possible way that a skilled person in the art could make any conclusions relating the temperature of a body of feed water to the rate of permeation and vaporization of that feed water through a porous body. Further, in the Kaufmann device feed water is atomized (sprayed) onto the absorber member prior to becoming heated. In the present invention feed water fills the porous tube, and subsequently becomes heated. In the present invention, the temperature of that reservoir is controlled by the rate of feed in order to optimize permeation and vaporization. The Applicant respectfully submits that the Kaufmann apparatus is wholly irrelevant to the present invention.

Referring to Coffey US 3785931, this document discloses the use of a porous member. However, on review of this specification it is clear that feed water does not fill the porous member, nor is this suggested. For example at column 2 line 55 "the purpose of distributor 18 is to feed water at pipe 20 to the walls of the porous tube only and not to its center." Further, in the first embodiment of the Coffey invention, quoting from column 1, line 59 "raw water is fed to the top of the porous evaporator and slowly percolates down to the bottom of the member to a waste water drain." The present invention describes filling the porous member wherein the bottom of the porous tube is sealed. The Coffey invention discloses water slowly percolating down and at the bottom being collected by a wastewater drain. The two are wholly different. Referring to column 2, line 1 of Coffey, "in a second embodiment, raw water is fed to the bottom of the microporous evaporator. Capillary forces carry the water up the tube". In this second embodiment capillary forces carry water up the tube, clearly nowhere in the Coffey specification is there described an apparatus where the porous body is filled. Nowhere in the document is it considered that it may be advantageous to permeate feed water through the porous member. Coffey uses the microporous member as nothing more than a wick to distribute feed water. The subsequent advantages of filtering and permeating through a porous member are not realized, nor anticipated. It is respectfully submitted that no skilled person in the art could consider Coffey, even combined with Kaufmann or other prior art and make any realizations relating the temperature of a body of feed water to the rate of permeation and vaporization of that feed water through a porous body and thereby discover such an advantageous improvement to water treatment.

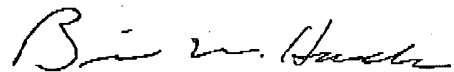
In the Office Action, the Examiner states that "'temperature' is more process rather than the apparatus to which the claims are directed". The Applicant respectfully submits that what is claimed is an apparatus that controls the rate of feed water flow in order to maintain an optimal operating temperature that produces an optimized rate of permeation and vaporization. The

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inventiveness of regulating the feed water flow to achieve an optimum operating temperature is discussed in the original specification in paragraphs 0025 through 0028. The present claims have been amended to that discussion. Specifically, Claim 1 now includes the text, "said rate of flow regulated to achieve and operating temperature of said feed liquid in said porous absorber body". This text is taken from Claim 8, Claim 17, and in particular paragraph 0028 of the original specification. Claim 1 has been further amended to include a portion from the original Claim 2: "and wherein said porous absorber body extends between two ends, the first end being open to receive said feed liquid and the second end being closed to prevent flow of said feed liquid therefrom". As such, the Applicant considers that the amendments to the claims do not add any new matter that would require the further consideration or search by the Examiner.

In light of the foregoing response, all the outstanding objections and rejections have been overcome. Applicant respectfully submits that this application should now be in better condition for allowance and respectfully requests favorable consideration.

Respectfully submitted,



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Date

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